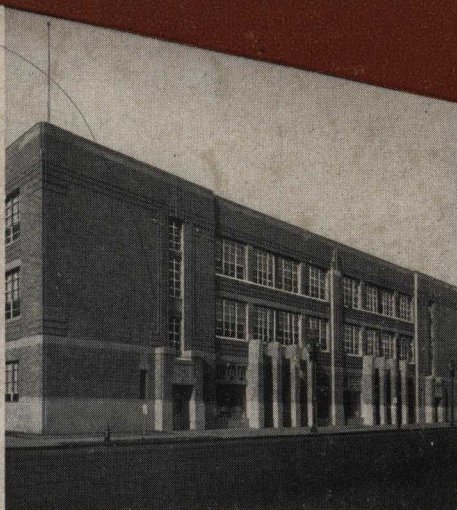




**STEEL BUILDING PRODUCTS
FOR THE
STRUCTURES OF 194X**

by

Ceco

Ceco WINDOWS AND DOORS

PRODUCTS

In This Catalog:

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Other Ceco Products:

Metal Lathing Material, Meyer Steelform Construction, Wire Fabric Reinforcement, Reinforcing Bars, Metal Weatherstrips, Metal Frame Screens.

For Complete Information on Ceco Metal Frame Screens, See File Index.



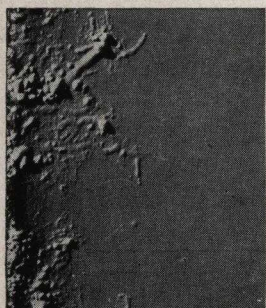
CECO OFFERS A COMPLETE LINE OF QUALITY PRODUCTS—This catalog deals specifically with Ceco Steel Windows, Doors and Mechanical Operators. The Ceco organization also offers to the construction industry the complete line of related products listed on this page. Ceco's 31 years of experience, its standard of rigid inspection and fine quality materials stand behind every one of these products.

WIDE RANGE AND ADAPTABILITY FOR EVERY TYPE OF BUILDING—

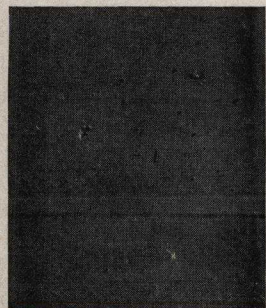
The Ceco line is so complete and so flexible that every type of building, from the small residence to the largest commercial or institutional building, may be equipped with Ceco Steel Windows and Doors and other Ceco products.

WE SHALL BE HAPPY TO COOPERATE WITH YOU—You are invited to utilize the Ceco design, engineering and manufacturing facilities. Ceco engineers, backed by years of practical experience, are always ready to help you.

CECO BRANCHES ARE STRATEGICALLY LOCATED FOR PROMPT SERVICE—(See Back Cover)—The Ceco organization fully appreciates the importance of prompt delivery of materials to any project. For that reason, Ceco manufacturing facilities have been constantly expanded to assure adequate service. Branch warehouses and sales offices are strategically located throughout the United States for your convenience.



A panel not Bonderized, after six months of sub-tropical atmosphere.



A Bonderized panel of steel after exposure to six months of sub-tropical atmosphere.

BONDERIZING *For Protection Against Rust!*

Twin causes of increased maintenance costs are corrosion of metal surfaces underlying paint and the lack of sufficient bond between the paint and the metal itself. The "Bonderizing" process now offered by Ceco gives protection against these problems of paint failure and rust on metal surfaces that are subjected to severe exposure.

In the "Bonderizing" process, a phosphate coating is produced on the metal surface. This coating, known as "Bonderite," is a crystalline structure integral with the metal. Bonderite forms an effective barrier against moisture because it is insoluble in water. In addition, the countless interstices between the microscopic crystals permit paint to penetrate and form strong "keys." The result is a durable, weatherproof surface.

NOTE: Bonderizing is standard on Ceco Casements and Basement Windows. Other

Ceco steel window or door products can be Bonderized at slight extra cost when the following is included in the specifications:

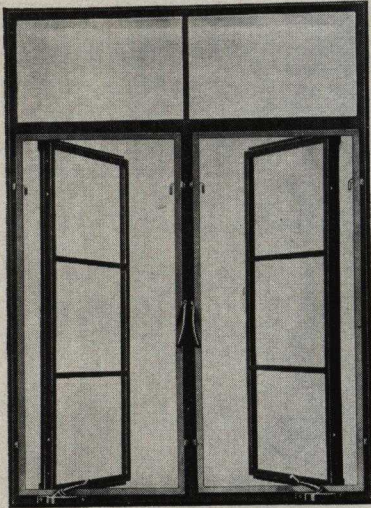
BONDERIZING—After fabrication, a clean, grease-free surface for chemical treatment shall be provided by thoroughly cleaning windows in a hot alkali solution to remove all oil, grease, and foreign matter. The windows shall then be rinsed in hot water and processed by Bonderizing.

This shall be followed by a rinse in cold water and then a rinse in a dilute solution of chromic acid. The windows shall then be immediately dried and brought to a uniform temperature proper for painting. Paint shall be of a character especially adapted to materials coated with phosphates. Paint shall be a part of the continuous process. Windows shall be oven dried for at least 30 minutes at a temperature of not less than 300 degrees.

2/29

CECO STEEL PRODUCTS CORPORATION

RESIDENCE CASEMENTS



Flexibility in the design of CECO Steel Casements meets the modern demand of architects for distinction and close harmony in the appearance of the finished building.

SPECIFICATIONS

GENERAL—All windows shall be the Residence Type Casements as manufactured by the Ceco Steel Products Corporation of Chicago, Illinois, or approved equal, as per written approval of the architect and shall be of sizes and types as shown on architect's drawings.

MATERIAL—All sections shall be especially designed, hot-rolled, new billet steel.

All frame and ventilator members shall be special Z shaped sections and shall be of 1-1/8" depth from front to back and not less than 1/8" in thickness.

Ventilator members to be rolled with a baffle providing a continuous two point weathering contact, with frame members, throughout the entire perimeter of the ventilator without the aid of loose or applied linings.

Corners of frame and ventilator members shall be mitred and electrically butt welded, with exposed surfaces at welds ground to a smooth finish.

All muntins shall be special rolled T's with 5/8" face and a depth of 7/8" and shall be continuous between rails and stiles.

Head Drips shall be special formed members.

CONSTRUCTION—All windows shall be prepared to receive vertical muntin inserts when vertical muntins are required. (Vertical muntin inserts will be furnished at slight extra cost.)

A continuous drip shall be provided at transom bar and at head of all openings where the swing leaves extend the full height of opening.

Horizontal and vertical mullions provided where necessary, to be of hot-rolled T shape members.

Side hinged ventilators to open out shall be hung on extension cleaning hinges of mild rolled steel sections. One hinge leaf securely welded to frame, the other leaf riveted to ventilator.

All casements to be provided with open holes in both jambs near head for standard shade and drapery brackets. (Brackets not furnished by Ceco Steel Products Corporation.)

All casements shall be prepared for the standard application of screens.

HARDWARE—All unattached hardware shall be packed and shipped separately to prevent damage and shall be applied after erection.

Hardware shall be Roto or Lever type. (Architect to specify which type is required.)

Hardware shall control the ventilator independently of the screen. Roto or Lever hardware shall securely hold the ventilator in open position.

The Roto operator shall be die cast with bronze lacquer finish.

(Solid bronze hardware with polished finish may be obtained at slight extra cost.)

The Lever type operator shall be pressed steel with bronze lacquer finish.

Operator arms shall be cadmium plated (locking handle keeper and channel guide for operator shall be attached in shop).

For side-hinged ventilators die cast, bronze lacquer finish cam action locking handles shall be furnished.

All hardware shall be attractively and accurately designed for operation required.

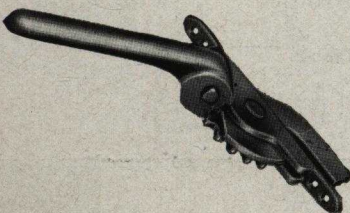
SCREENS—All screens shall be especially designed for use with Residence Casements as manufactured by the Ceco Steel Products Corporation.

Screens for the Roto or Lever type casements shall be the flat fixed type. All screens shall be easily attached or removed from the inside.

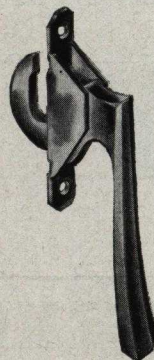
(Note: For complete information on screens, see File Index.)

For types and sizes not shown on page 4 and for complete information on Casement Doors, consult nearest branch office or representative.

At right—No. 122*, No. 7122 Locking Handle Roto Casement.



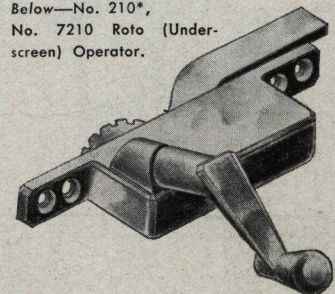
Above — No. 8215 Lever Type Operator.



Above—No. 8000 Extension Cleaning Hinge (Friction or Non-friction).

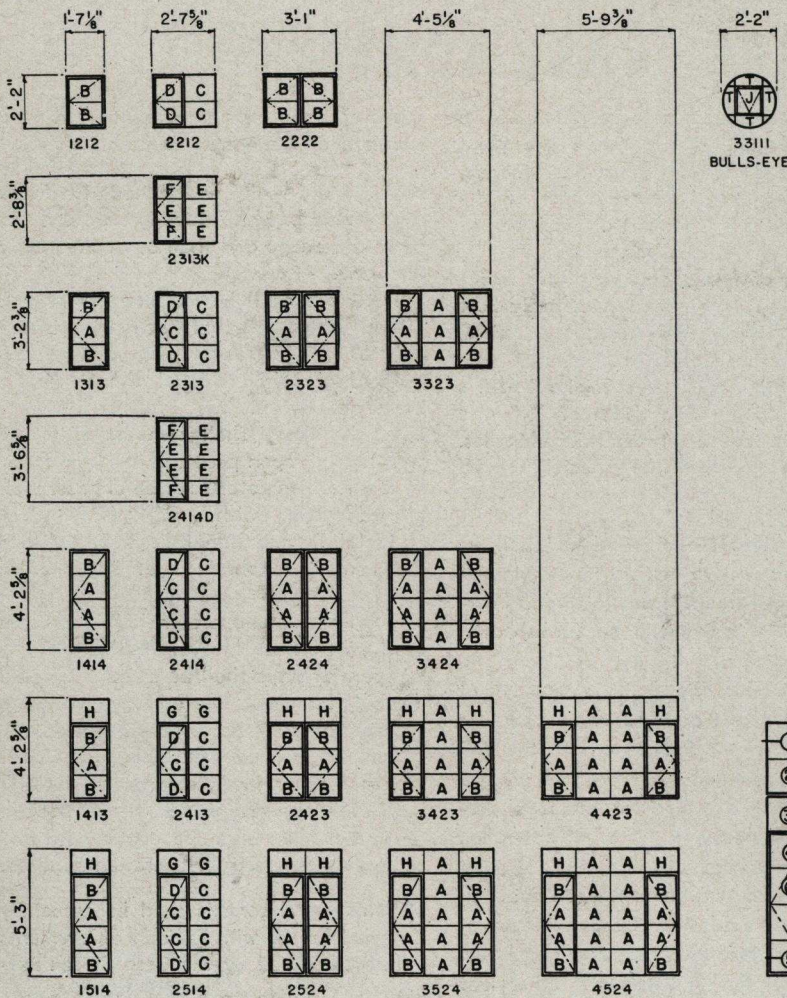


Below—No. 210*, No. 7210 Roto (Under-screen) Operator.



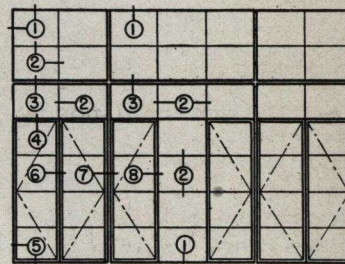
*Polished Bronze Finish.

CECO STEEL PRODUCTS CORPORATION



GLASS SIZES	
LETTER	SIZE
A	16" x 12"
B	16" x 11 ⁵ / ₁₆ "
C	14" x 12"
D	14" x 11 ³ / ₁₆ "
E	14" x 10"
F	14" x 9 ⁵ / ₁₆ "
G	14 ³ / ₄ x 12"
H	17 ¹ / ₄ x 12"
J	12" x 12"
T	TEMPLATE

LETTER SYMBOLS IN ABOVE TABLE REFER TO GLASS SIZES ON THIS PAGE ONLY



All windows shown are available in Fixed Types. All ventilators swing out, and are furnished with underscreen type of hardware, either Lever or Roto type, permitting opening of screened windows without touching screen.

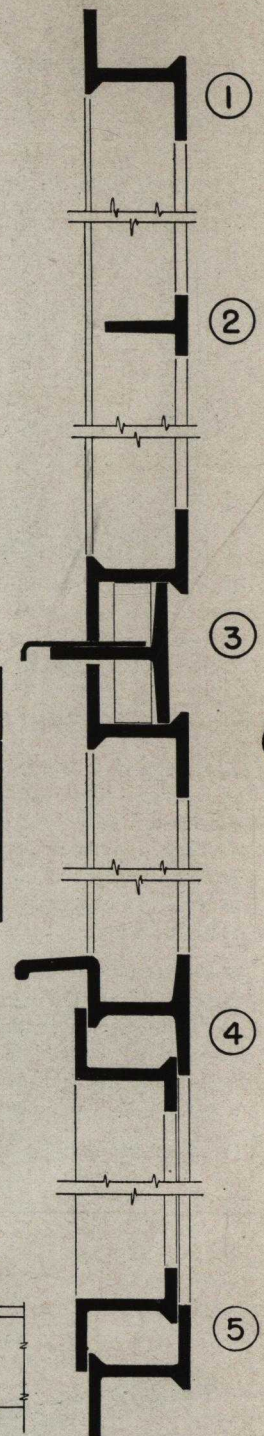
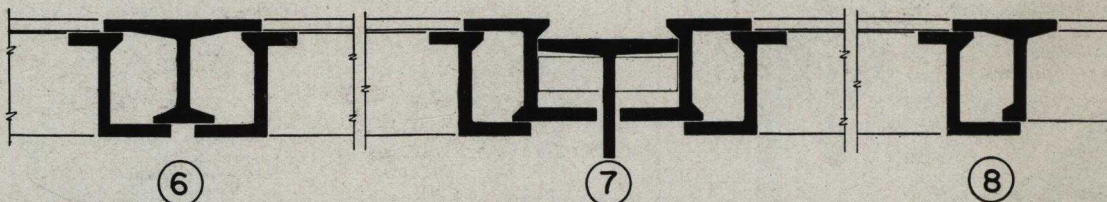
Sizes shown are window dimensions. For opening dimensions of single units ADD ¹/₄". When more than one unit is used for multiple window opening add actual unit dimensions PLUS ¹/₄". Nothing need be added for mullions.

Indicate whether ventilators are right- or left-hand. All casements are viewed from outside. Handed of casement is determined by location of hinges. Hinged at right is a right-hand casement. Hinged at left is a left-hand casement.

All windows are set in mastic cement furnished with casements.

Types shown are standard Horizontal Muntin Types. Vertical Muntins will be furnished at slight extra cost.

Sizes shown are new post-war dimensions as adopted by the Metal Window Institute.

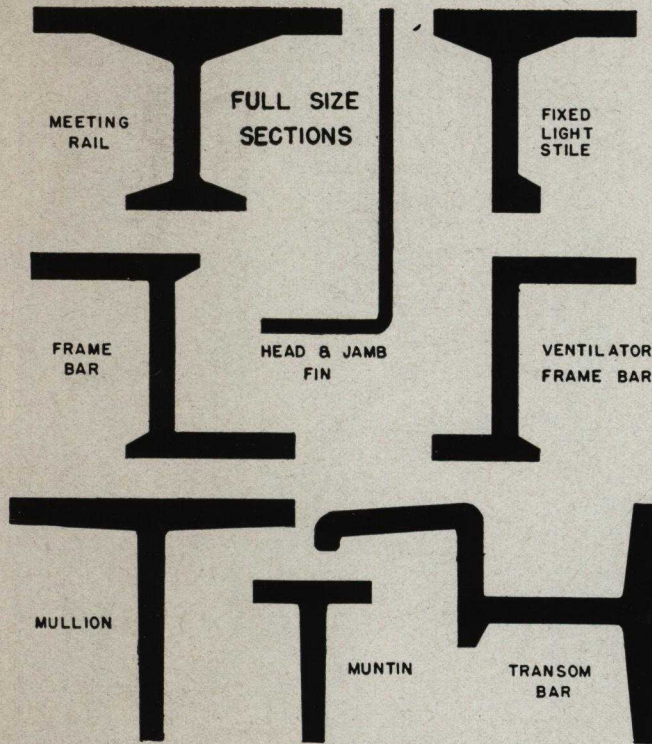


Ceco

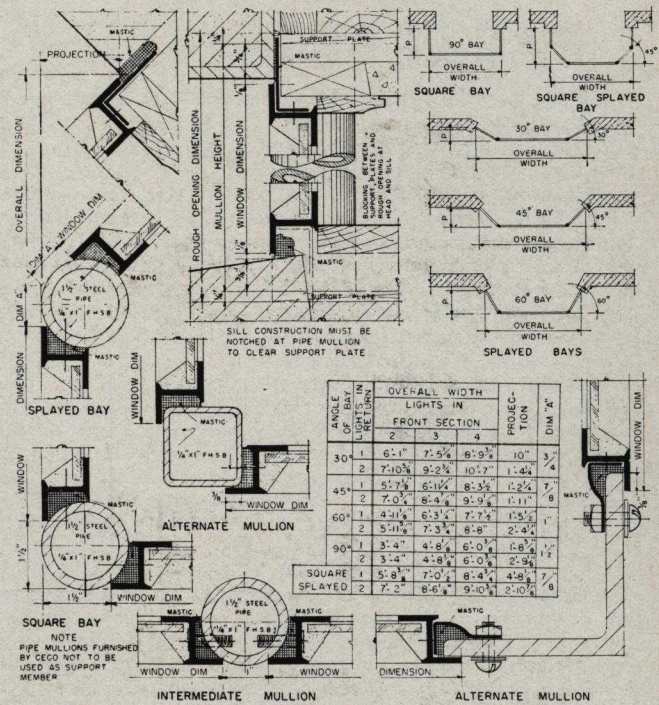
RESIDENCE CASEMENTS
STANDARD TYPES AND SECTIONAL DETAILS

PLATE
1

CECO STEEL PRODUCTS CORPORATION



PIPE MULLIONS, CORNERS, TYPICAL BAYS



CECO STEEL PRODUCTS CORPORATION

THE POST WAR PACKAGE WINDOW

The NEW Ceco Package Window is a unit-built steel casement, glazed, outside wood cased, inside wood trimmed, with all hardware included—particularly designed, constructed and priced for use in low-cost home construction.

Each window is delivered to the job with steel frame and ventilator fitted, hinged, hung and assembled; frame and ventilator Bonderized and painted with one prime coat baked on for 30 minutes at a temperature of 300°; properly and neatly glazed; attractive, bronze lacquer finish Lever type operating hardware and locking handle; sturdy wood casing attached with outside trim and sub-sill; special inside trim, stops, stool and apron supplied (unattached) when specified.

Sections, materials and construction features of Ceco Package Windows are similar to, and of the same high quality as those used in Ceco Residence Casements. Supplied in sizes best suited to the small home and comparable in glass and ventilating areas to popular sizes of double-hung wood windows.

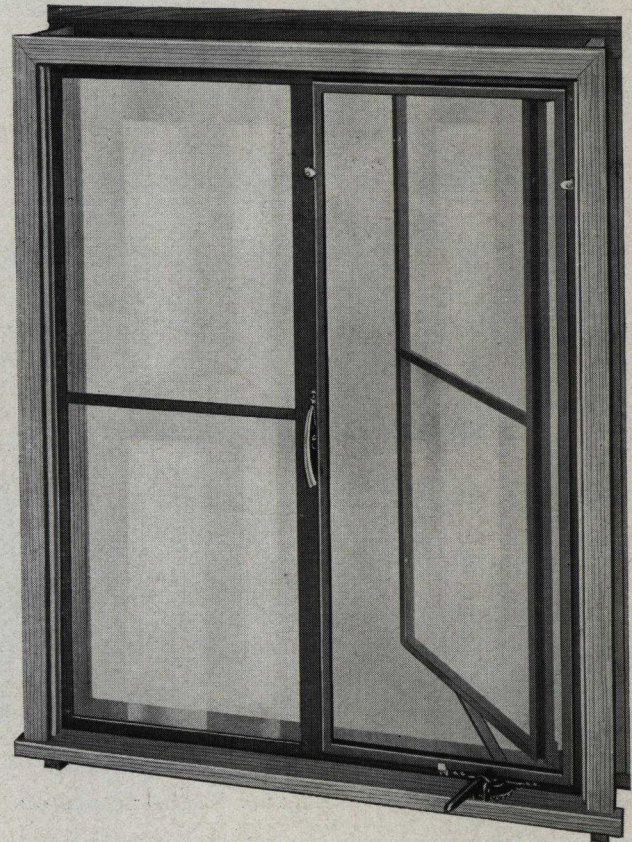
INSTALLED QUICKLY—WITH HAMMER AND NAILS

The Ceco Package Window can be correctly installed by one man, on the outside, in less than 5 minutes, using hammer and nails only. Unit is simply placed in rough opening, plumbed, wedged and securely nailed to building construction through jambs and head of wood casing. Inside trim is quickly attached, completing the installation.

The Ceco Package Window eliminates all installation difficulties; with it there is no fitting of sash or frame, no glass or putty to handle, no extras to buy or be misplaced. Likewise, there is no planing or fitting of screens.

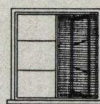
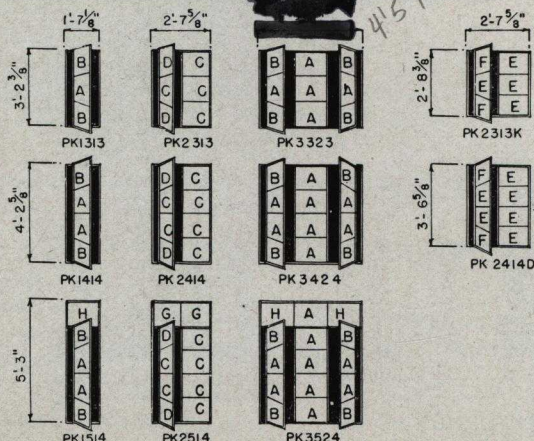
INSIDE SCREENS

The Package Window is all ready to receive a low cost, prefabricated Ceco Inside-Screen, with 16 mesh wire cloth held in a sturdy and attractive pressed-steel frame, Bonderized, painted with one prime coat baked on for 30 minutes at a temperature of 300°. Screens are safely, quickly attached, interchangeable—need no marking or numbering when stored; undisturbed when windows are operated.



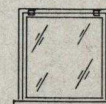
OUTSIDE STORM SASH

The window is also designed to receive a standard, low cost, inside or outside wood-frame storm sash. Hangers for supporting storm sash at head, and a steel hook linking storm sash and casement ventilator at sill (providing limited ventilation) are supplied when specified and when outside storm sash are used.



CECO
SCREENS

SCREENS AND STORM SASH ARE SUPPLIED AT EXTRA COST ONLY WHEN SPECIFIED. ALL ATTACHMENT CLIPS, HOOKS AND SCREWS ARE FURNISHED WITH THESE ITEMS. ORDERS FOR SCREENS OR STORM SASH NOT ACCOMPANYING ORDERS FOR WINDOWS SHOULD SPECIFY TYPE OF WINDOWS FOR WHICH THEY ARE TO BE USED. ALL VENTILATORS SWING OUT. FOR INSTALLATION DETAILS SEE PAGE 7. UNITS WITH SINGLE VENTILATORS MAY BE RIGHT OR LEFT HAND. HAND OF THE UNIT IS DETERMINED BY THE LOCATION OF THE HINGES WHEN VIEWED FROM THE OUTSIDE. ALWAYS INCLUDE THE SUFFIX "R" (HINGED AT RIGHT) OR "L" (HINGED AT LEFT) WHEN ORDERING SINGLE VENTED UNITS; THUS PK1313-R OR PK1313-L.



CECO
STORM SASH

GLASS SIZES	
LETTER	SIZE
A	16"X12"
B	16"X11 5/16"
C	14"X12"
D	14"X11 5/16"
E	14"X10"
-F	14"X9 3/16"
G	14 3/4"X12"
H	17 1/4"X12"

SYMBOLS USED IN ABOVE TABLE REFER TO GLASS SIZES ON THIS PAGE ONLY

DIMENSIONS SHOWN ARE ACTUAL WINDOW SIZES.
ADD 2" TO WINDOW DIMENSION FOR ROUGH OPENING WIDTH.
ADD 3 1/2" TO WINDOW DIMENSION FOR ROUGH OPENING HEIGHT.
ADD 3 3/4" TO WINDOW DIMENSION FOR MASONRY OPENING WIDTH.
ADD 4 3/8" TO WINDOW DIMENSION FOR MASONRY OPENING HEIGHT.

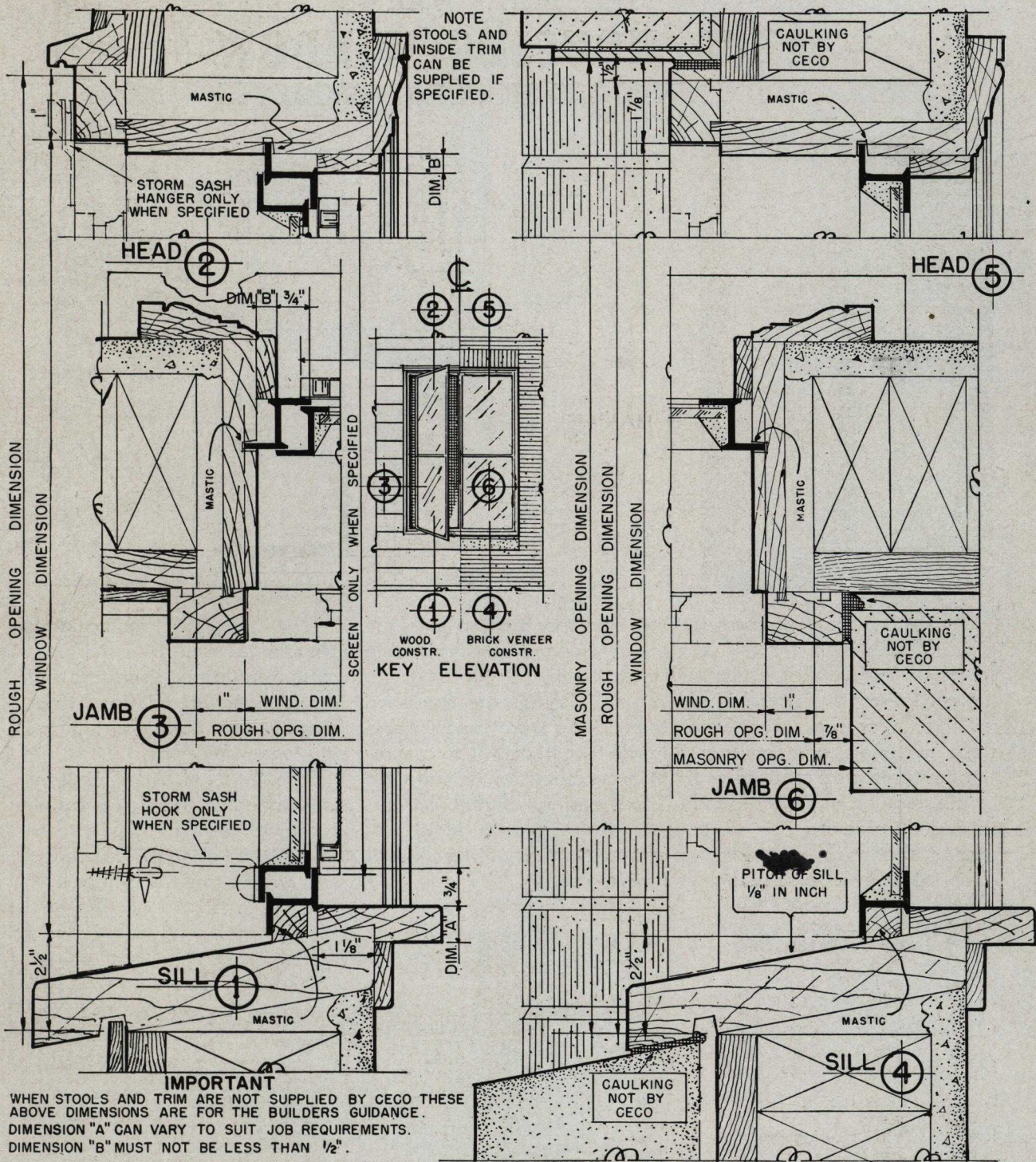
Ceco

POST WAR PACKAGE WINDOW

TYPES AND SIZES

PLATE
3

CECO STEEL PRODUCTS CORPORATION



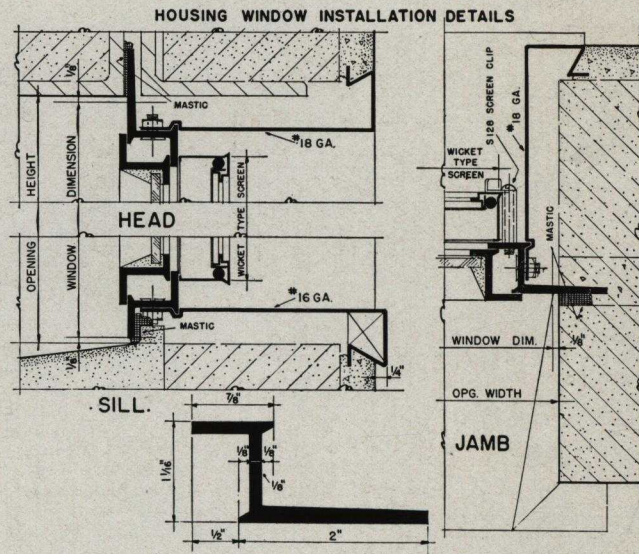
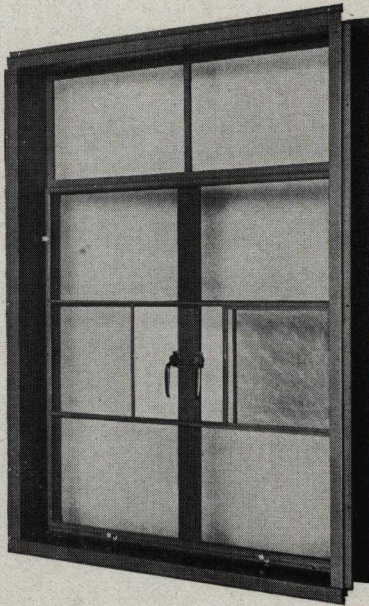
Ceco

POST WAR PACKAGE WINDOWS INSTALLATION DETAILS

PLATE
4

CECO STEEL PRODUCTS CORPORATION

THE POST WAR CECO HOUSING WINDOW FOR LOW COST HOUSING PROJECTS



The Ceco Housing Casement is specially designed for use in large low cost housing projects (either Private or Federal) involving 300 or more units. Sections, materials, and construction features are similar to and of the same high quality found in Ceco Residence Casements except that side and head-jamb frame members are long-

leg sections making possible the best anchorage in building construction.

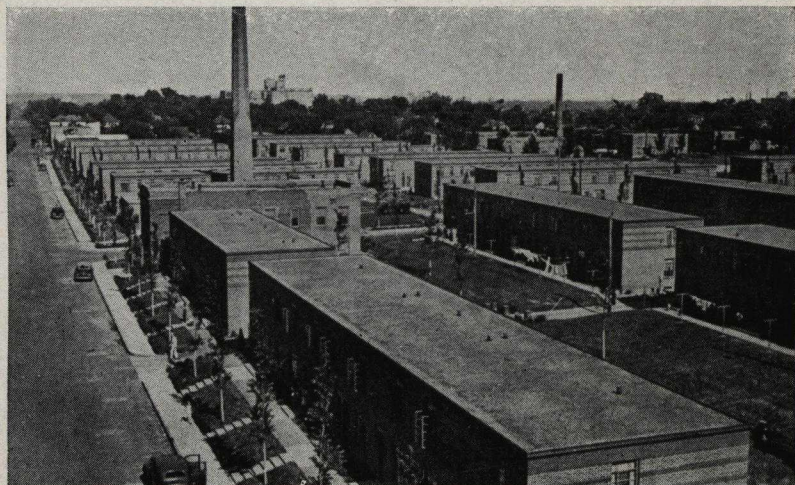
Steel Casings are furnished to provide a sturdy and durable inside trim in depths to accommodate various wall conditions. These casings eliminate interior trim and plaster difficulties and substantially reduce installation costs.

The "Simplex" type Locking Handle is used to open and close ventilators operating on an adjustable friction type hinge which holds ventilators in place when open.

The "Wicket Type" Screen is standard which permits reaching through the screen to open and close the casement leaf when screen is in place.

PARTIAL LIST—CECO HOUSING WINDOW INSTALLATIONS

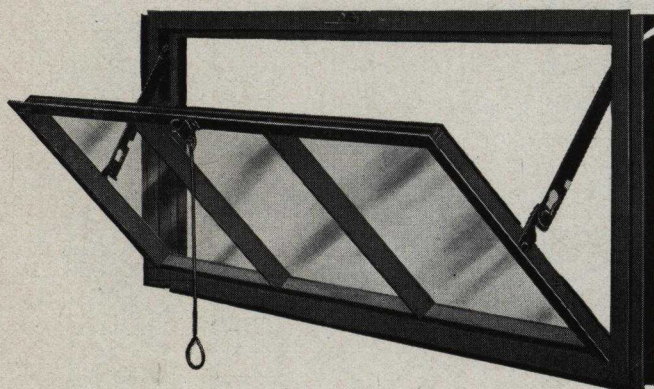
West Palm Beach Housing Project
West Palm Beach, Florida
Navy Housing Project
San Diego, California
Lincoln Heights Courts Housing Proj.
San Antonio, Texas
South Side Terrace Homes
Omaha, Nebraska
Roseland Homes Project
Dallas, Texas
Irvington Courts Housing Project
Houston, Texas
Elyton Village Housing Project
Birmingham, Alabama
Hillyer Street Housing Project
Hartford, Connecticut
Harrison Gardens Housing Project
Harrison, New Jersey
Ivanhoe Gardens & Duneland Village
Housing Projects
Gary, Indiana



CECO STEEL PRODUCTS CORPORATION

CECO BASEMENT WINDOWS

The New Improved Ezee-Action Basement Window

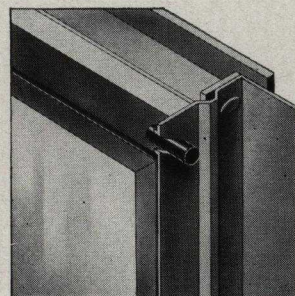
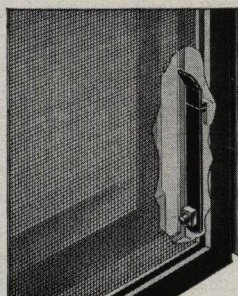


The window is Ezee to install; Ezee to glaze because it is Ezee to remove the vent by simply pressing inward on the side arms at the pivot points; Ezee to open and close by means of easily accessible rigid hardware; Ezee to ventilate in either of two positions. They are BONDERIZED and then painted (baked on).

There are new angle fins at the jambs which provide permanent anchorage and an accurate masonry guide. These new angle fins provide also a simple and foolproof method of hanging and attaching screens and storm sash and securely locking them from the inside. (See illustration at right.)

A new special angle lug at the bottom of the ventilator causes it to drop into correct position when closed, assuring tight weathering. The bottom rail of the ventilator serves as an effective drip as well as a contact member.

As always, CECO Ezee-Action Steel Basement Windows are made of the same hot-rolled sections used in CECO Residence Casements. This means rigid, sturdy windows. Ventilators have double-contact weathering on all four sides to help keep the basement dry.



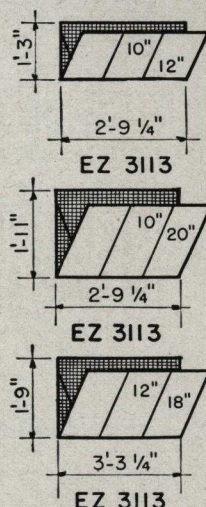
SCREENS

NEW METHOD OF ATTACHING NO PARTS TO LOSE!

Easy-to-use Screens and Storm Windows are available for all Ezee-Action Basement Windows. New attaching hardware is integral.

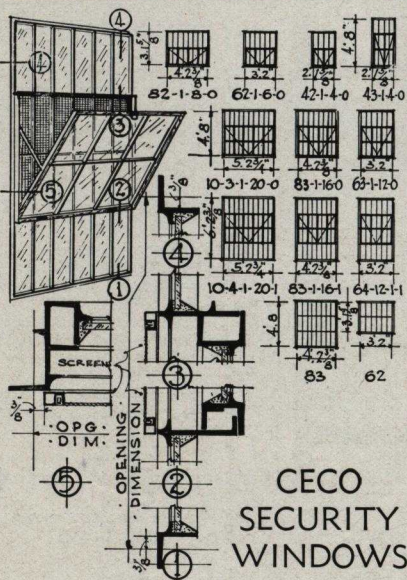
Ezee-Action Basement Windows are designed for either putty or puttyless glazing. All types are supplied for standard putty glazing unless otherwise specified, cork glazing strips and glazing angle clips being furnished upon request.

Using the top-hung principle, either Screen or Storm Window is easily dropped in place. Lugs at top drop into slots in fins. Bottom is snapped in place with finger-tip spring latch in side rail. No loose attachments to misplace . . . no bothersome parts to change. Spring latches are operated and locked from inside.



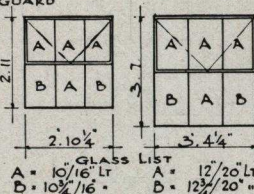
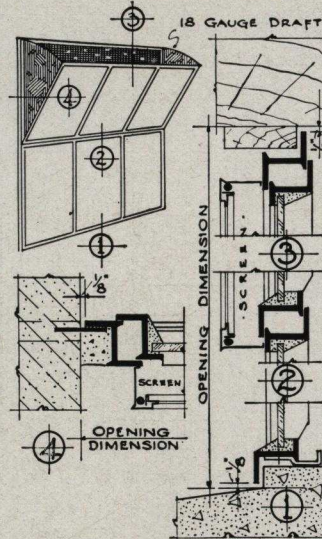
CECO SECURITY WINDOWS are designed for use in store buildings, warehouses and other buildings where adequate ventilation is required and burglary protection is of importance. The Security Window is a ventilated window and guard combined in one unit. The ventilator weathers with a two-point, flat contact at head, sill and jambs.

All openings in ventilator, as well as grille openings above or below the ventilator, are to be glazed. Grille openings immediately in front of ventilator are left unglazed.



CECO
SECURITY
WINDOWS

CECO BARN WINDOWS



CECO BARN WINDOWS are especially designed for use in Cattle, Stock and Dairy Barns. Built of CECO Casement Sections.

The operating features permit absolute control of ventilation. Ventilator side shields deflect air currents up and over the backs of the cattle.

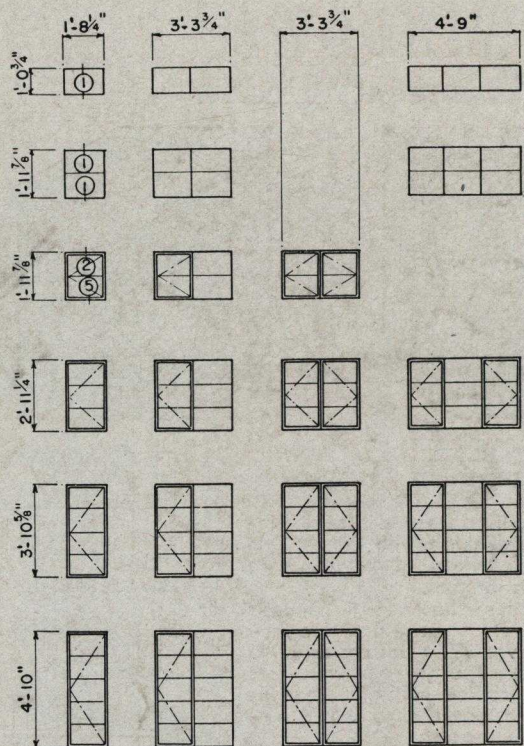
Ventilators can be removed, giving 100% ventilation in the ventilator portion when desired.

Ceco

BASEMENT, SECURITY,
AND BARN WINDOWS

PLATE
5

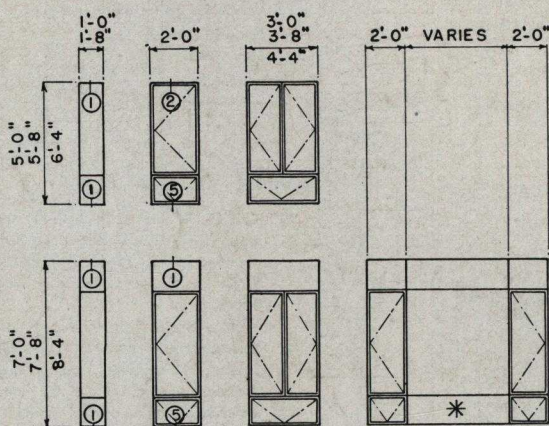
CECO STEEL PRODUCTS CORPORATION



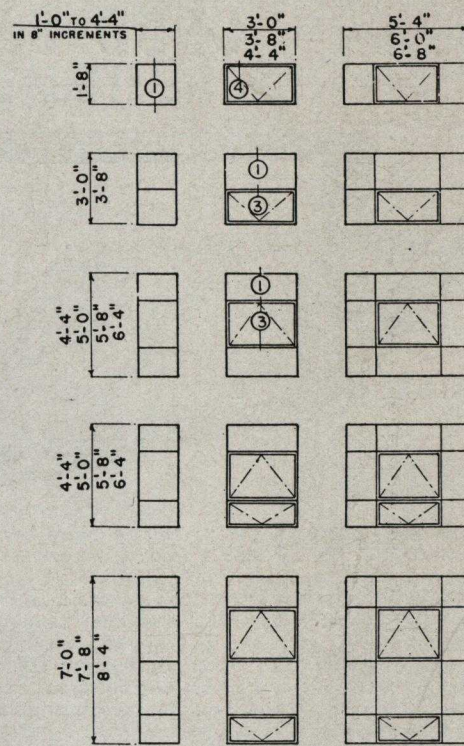
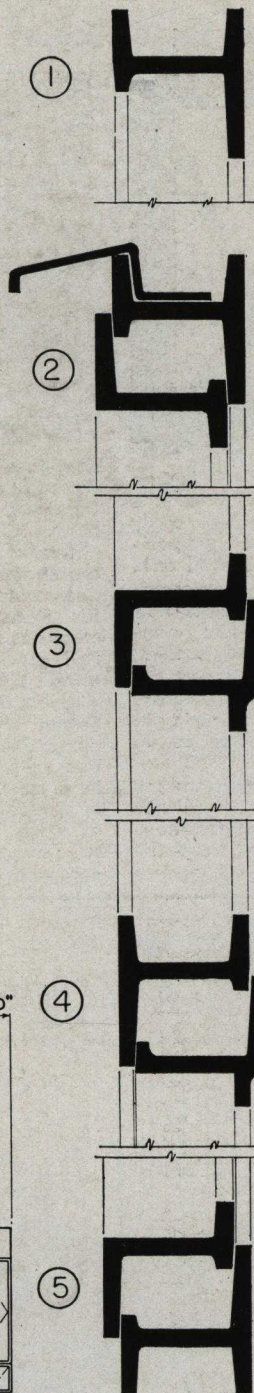
DIMENSIONS SHOWN ARE ACTUAL WINDOW SIZES
INTERMEDIATE CASEMENT



TYPICAL MULLION



DIMENSIONS SHOWN ARE REQUIRED OPENING SIZES
CASEMENT COMBINATION



DIMENSIONS SHOWN ARE REQUIRED OPENING SIZES
CASEMENT PROJECTED

GENERAL

Units with single side hinged ventilators may be right or left hand.

Hand of the unit is determined by the location of the hinges as viewed from the outside.

INTERMEDIATE CASEMENTS

The fixed transoms shown can be used in combination with any ventilated unit of corresponding width to provide a transom type opening.

Types shown are horizontal muntin types: vertical muntins or other muntin arrangements may be secured at slight extra cost.

CASEMENT COMBINATION

Fixed units, with or without muntin bars, can be furnished in sizes to conform with types shown.

Recommended limits for side hung ventilators not to exceed 5' 0" in height.

The projected in ventilator at the sill may be eliminated and a fixed light substituted if desired.

*For this type unit the recommended width for ventilators is 2' 0" with the dimension of the center fixed light variable to suit the architectural requirements. The recommended maximum width for this unit is 7' 8".

CASEMENT PROJECTED

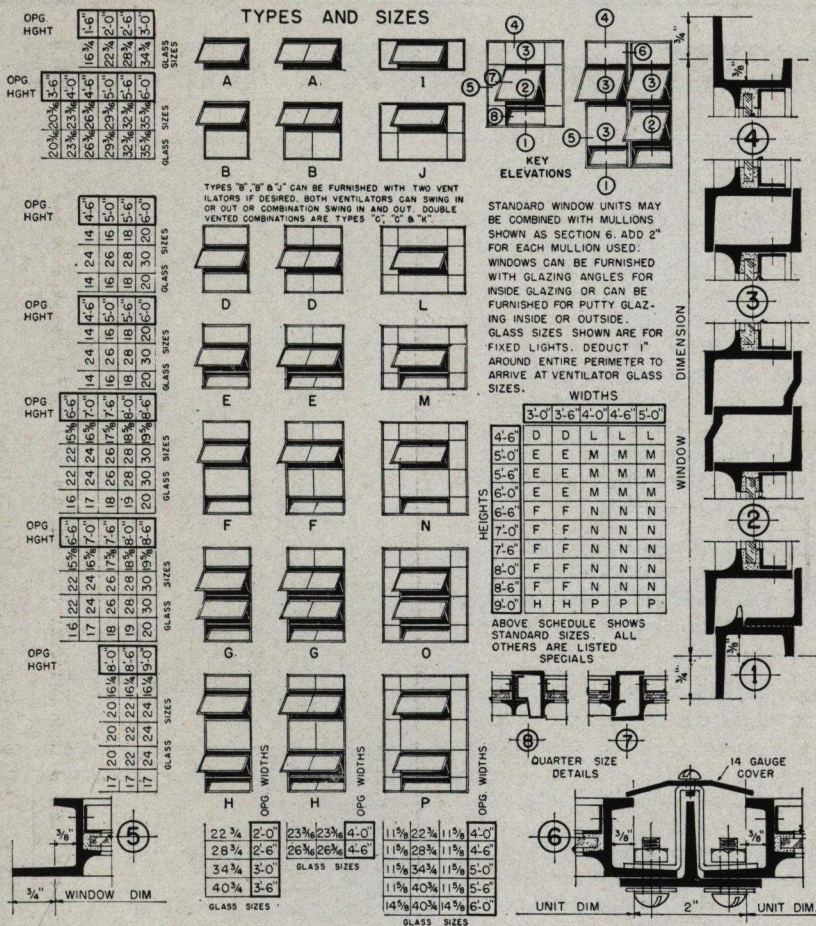
Fixed units in sizes shown can be furnished with or without muntin bars.

Ceco

**INTERMEDIATE CASEMENTS,
CASEMENT COMBINATION, CASEMENT PROJECTED**

**PLATE
6**

CECO STEEL PRODUCTS CORPORATION



SPECIFICATIONS

GENERAL—All windows shall be the Architectural Projected Type as manufactured by the Ceco Steel Products Corporation of Chicago, Illinois, or approved equal, as per written approval of the architect, and shall be of sizes and types as shown on architect's drawings.

MATERIAL—All sections shall be especially designed, hot-rolled, new billet steel.

All frame members shall be unequal leg channel section and shall allow $\frac{3}{4}$ " continuous anchorage.

Muntins shall be hot-rolled T Sections.

Mullions shall be standard CECO hot-rolled, solid steel T Sections.

CONSTRUCTION—All four corners of the frame and ventilator shall be solidly welded.

Muntins shall be continuous from head to sill and from jamb to jamb. Joints at frames shall be mortise and tenon air-hammer riveted.

Ventilators shall have double contact weathering continuous around all four sides.

Each ventilator shall be accurately balanced on two supporting arms of solid steel accurately riveted to the frame and ventilator and concealed when the ventilator is closed. Ventilators shall be operated by means of fully enclosed bronze friction shoes with a compression spring, assuring constant friction at all times.

Bronze shoes are to slide vertically in a channel guide especially adapted and applied properly to assure easy operation.

Provide mullion covers for mullions where called for on plans.

Furnish necessary clips, anchors and bolts for installing the windows.

(Note: Include in steel specifications punching to accommodate clips.)

HARDWARE—All hardware shall be polished bronze throughout.

All ventilators opening out shall be equipped with a bronze cam lock (No. 130) and pole ring (No. 700) of standard CECO design.

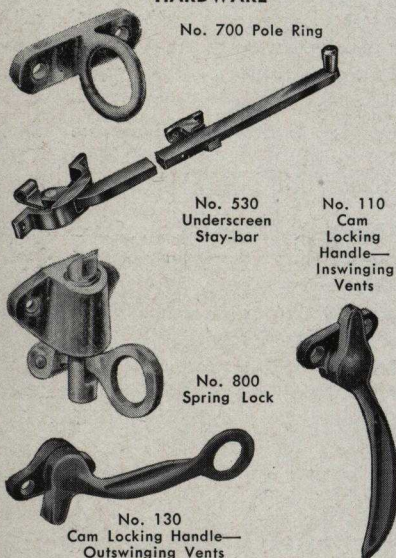
All ventilators opening in and within reach of the floor shall be equipped with bronze cam handle (No. 110).

All ventilators opening in and not easily accessible shall be equipped with automatic spring lock (No. 800).

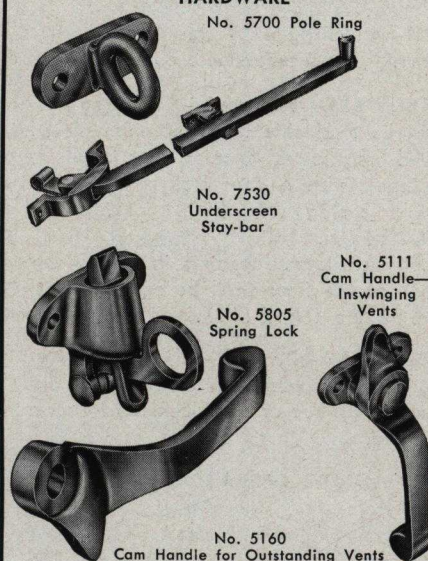
PAINTING—All windows shall be given one coat of gray paint, oven-dried, before shipment.

SCREENS—(Note: Screens and preparation for screens are not part of the window contract, but windows can be prepared and screens furnished by the Ceko Steel Products Corporation.)

ARCHITECTURAL PROJECTED WINDOW HARDWARE

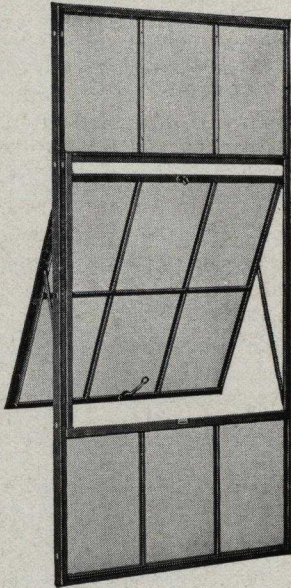


COMMERCIAL PROJECTED WINDOW HARDWARE



CECO STEEL PRODUCTS CORPORATION

COMMERCIAL PROJECTED and PIVOTED WINDOWS



For use in commercial and industrial buildings when shading and screening are very necessary. These windows are offered in a full range of Standard Types and Sizes.

SPECIFICATIONS

GENERAL—All windows shall be the Commercial Projected or Horizontally Pivoted Type as manufactured by the Ceco Steel Products Corporation of Chicago, Illinois, or approved equal, as per written approval of the architect and shall be of sizes and types as shown on architect's drawings.

MATERIAL—All sections shall be especially designed, hot-rolled, new billet steel.

All frame members shall be special angle section and shall allow $\frac{3}{4}$ " continuous anchorage.

Muntins shall be hot-rolled T sections.

Mullions shall be standard CECO hot-rolled solid steel T sections.

CONSTRUCTION—Frames and ventilators shall be mortise and tenon, air-hammer riveted at all corners. After assembling, all four corners of the frame and ventilator shall be solidly welded.

Muntins shall be continuous from head to sill and from jamb to jamb. Joints at frames shall be mortise and tenon, air-hammer riveted.

Ventilators shall have double contact weathering continuous around all four sides.

Projected Windows—Each ventilator

shall be accurately balanced on two supporting arms of solid steel accurately riveted to the frame and ventilator and concealed when the ventilator is closed. Ventilators shall be operated by means of fully enclosed bronze friction shoes suspended from the hinged point of the ventilator with a compression spring, assuring constant friction at all times.

Bronze shoes are to slide vertically in a channel guide especially adapted and applied properly to assure easy operation.

All weathering members shall be securely welded to the frame and ventilator members.

Pivoted Windows—All ventilators shall be horizontally pivoted and supported by special solid rolled steel external butts, double riveted through the weathering and window members.

Projected and Pivoted—Where two or more windows are placed side by side in the same opening, provide CECO Vertical Mullions.

Mullions shall extend 2" into sills for anchorage.

Where two or more windows are placed one above another in the same opening, provide CECO Horizontal Mullions.

Provide mullion covers for mullions where called for on plans.

Furnish necessary clips, anchors and bolts for installing the windows.

(Note: Include in steel specifications punching to accommodate clips.)

HARDWARE—Projected—All hardware shall be malleable iron, cadmium plated.

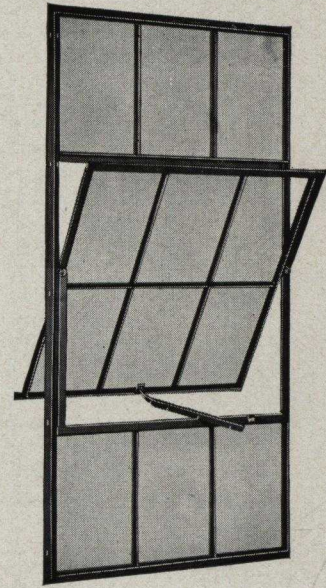
All ventilators opening out shall be equipped with a cam lock (No. 5160) and pole ring (No. 5700) of Standard CECO design.

All ventilators opening in and within reach of the floor shall be equipped with cam handle (No. 5111).

HARDWARE—Pivoted—All ventilators shall be equipped with spring latch and chain, push-bar or cam lock hardware as required.

MECHANICAL OPERATORS—All runs of ventilators shown on drawings as "Mechanically Controlled" shall be equipped with approved type of operator as furnished Ceco Steel Products Corporation.

PAINTING—All windows shall be given one coat of gray paint, oven-dried, before shipment.



Where shading and screening are not so essential and a slight economy is desired, Ceco Pivoted Windows are ideal. The usual Ceco standards of quality are embodied.

SCREENS—Projected—(Note: Screens and preparation for screens are not part of the window contract, but windows can be prepared and screens furnished by the Ceco Steel Products Corporation.)

(Note: Flat screens applied to the outside of window for the Projected-In Ventilators and inside for the Projected-Out Ventilators.)

(Note: Underscreen hardware (No. 7530) can be furnished for Projected-Out Ventilators at a slight additional cost.)

SCREENS—Pivoted—(Note: Screens and preparation for screens are not part of the window contract, but windows can be prepared and screens furnished by the Ceco Steel Products Corporation.)

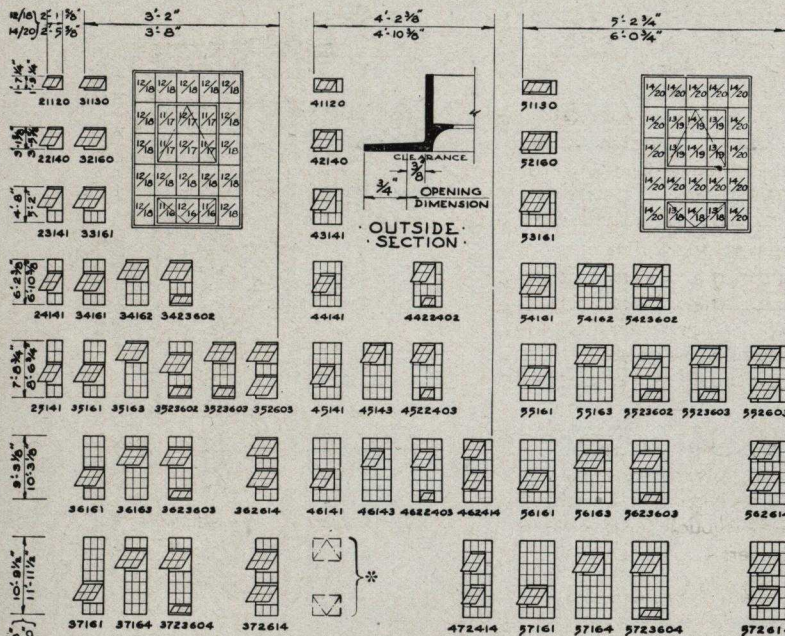
(Note: Metal screens are so arranged that the upper half of the screen is outside of the ventilator and the lower half on the inside.)

For complete information on Screens, see File Index.

UNDERWRITERS—Underwriters' label of approval may be specified for all standard sizes shown and special sizes up to 7' 0" in width by 12' 0" in height. These windows must be inside angle glazed. The maximum glass size is 350 sq. in.

CECO STEEL PRODUCTS CORPORATION

Types and Sizes—Commercial Projected Windows



NOTES

Opening dimensions shown above the dimension line indicate opening sizes for units of 12" x 18" glass size. Opening dimensions below the dimension line indicate opening dimensions for units of 14" x 20" glass size.

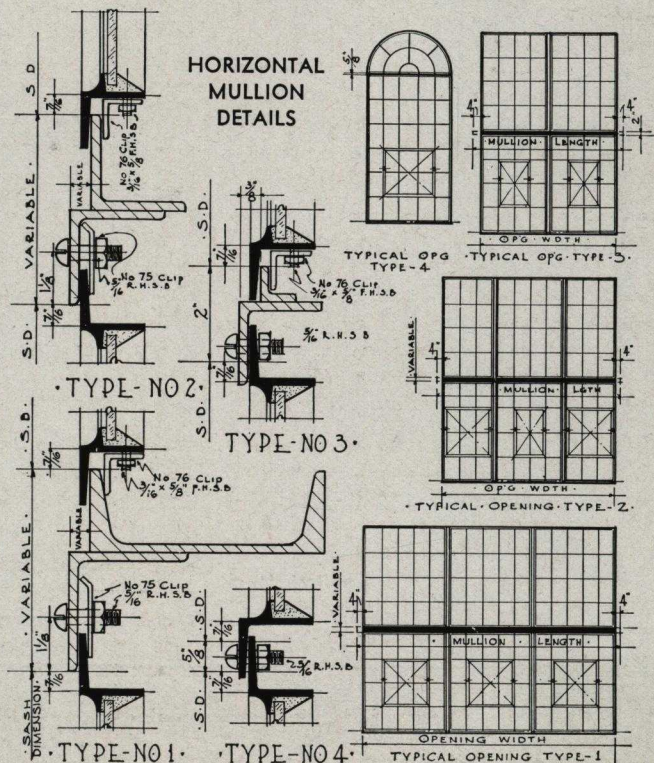
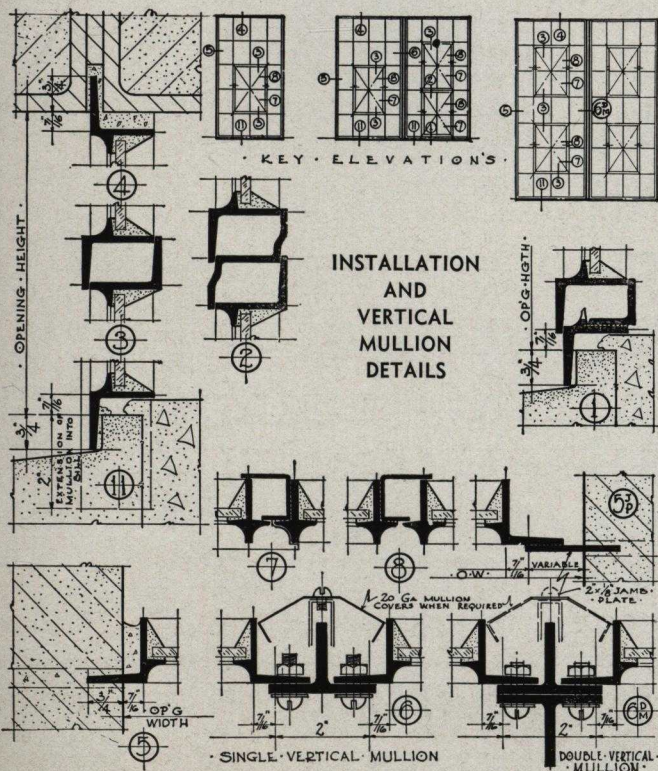
Unit dimensions shown here are for masonry openings and two or more units may be combined by using mullions. The width of opening for a multiple unit opening is equivalent to the sum of each individual unit, plus 2" for each mullion added.

Ventilators shown as Projected-In or Projected-Out may be reversed without additional cost.

All types are punched for mullion bars.

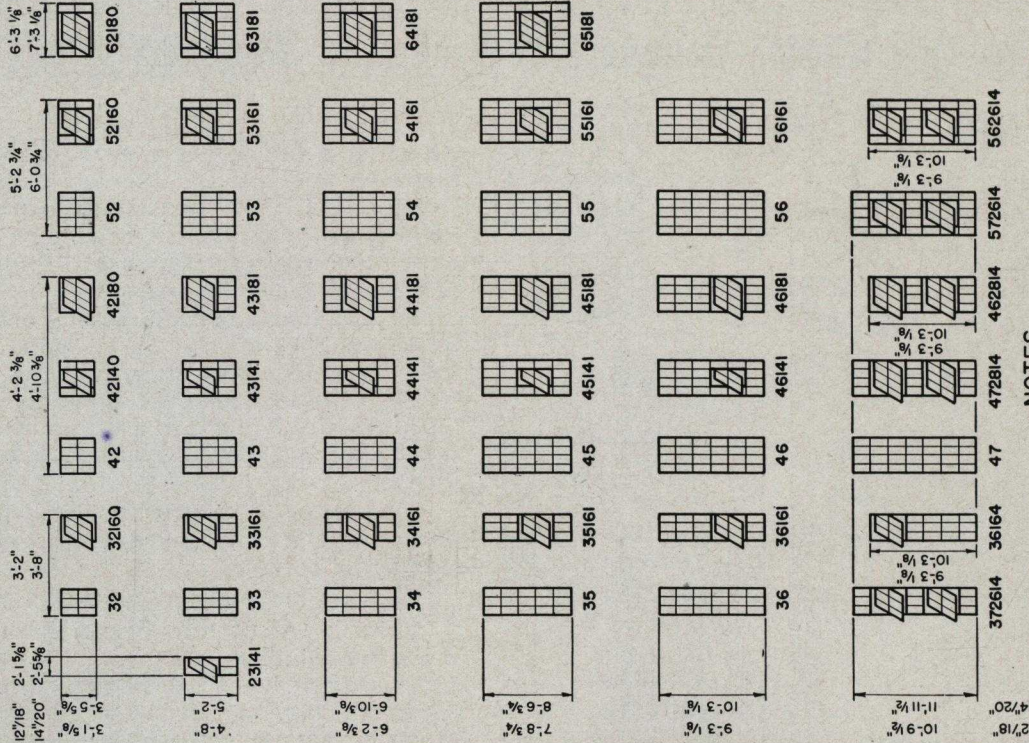
Glass for Ventilators: The proper glass sizes for windows are shown at upper right and left. Ventilators call for smaller lights which should be cut to dimensions given in these diagrams.

Mullions—Commercial Projected and Pivoted Windows



CECO STEEL PRODUCTS CORPORATION

STANDARD TYPES AND SIZES



NOTES

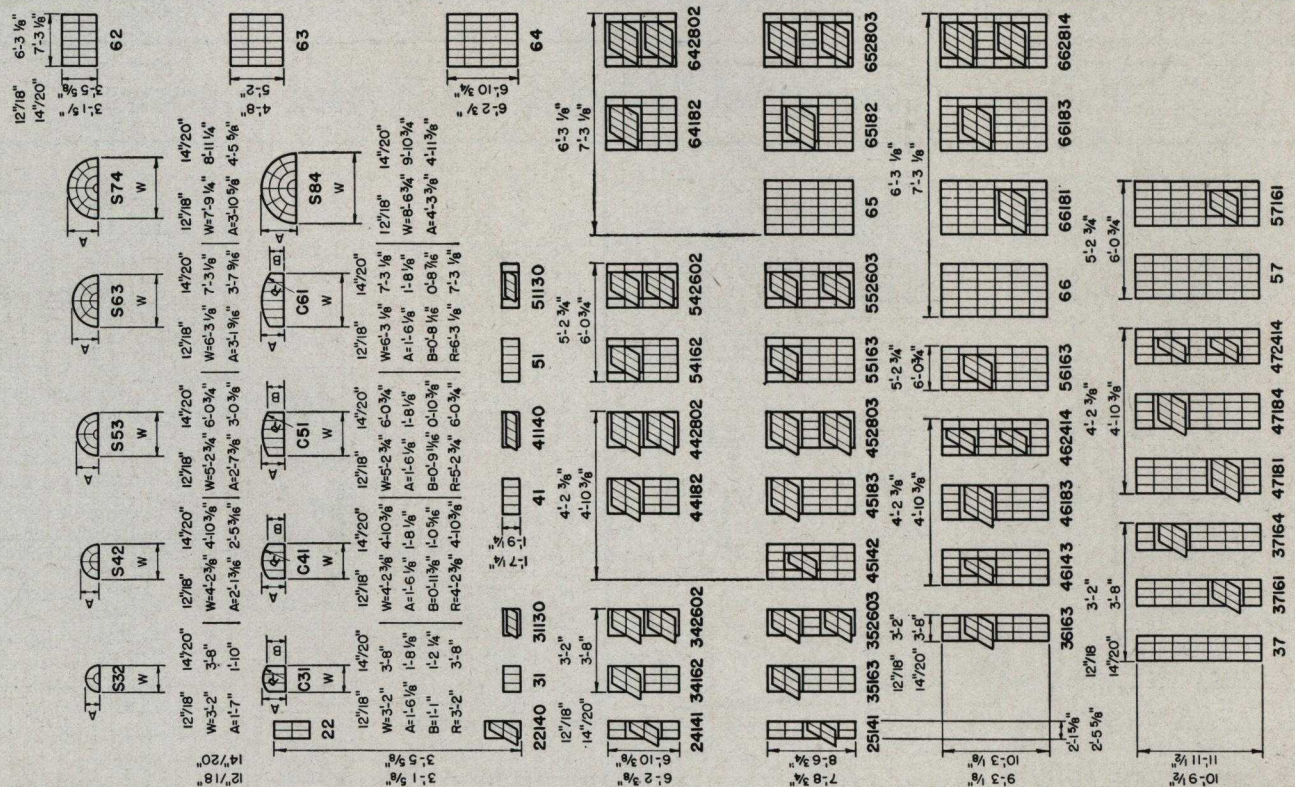
THE LARGER DIMENSIONS SHOWN INDICATE OPENING SIZES FOR UNITS OF 14'20" GLASS SIZE. THE SMALLER DIMENSIONS INDICATE OPENING SIZES FOR UNITS OF 12'18" GLASS SIZE.

UNIT DIMENSIONS SHOWN HERE ARE FOR MASONRY OPENINGS AND TWO OR MORE UNITS MAY BE COMBINED BY USING MULLIONS. THE WIDTH OF OPENING FOR A MULTIPLE UNIT OPENING IS EQUIVALENT TO THE SUM OF EACH INDIVIDUAL UNIT, PLUS 2" FOR EACH MULLION ADDED.

MULLION DETAILS FOR PIVOTED WINDOWS ARE ILLUSTRATED ON PAGE 9.

REFER TO DIAGRAMS SHOWN AT LEFT AND RIGHT FOR PROPER GLASS SIZES. CUT GLASS TO DIMENSIONS GIVEN.

NEAR STANDARD TYPES AND SIZES

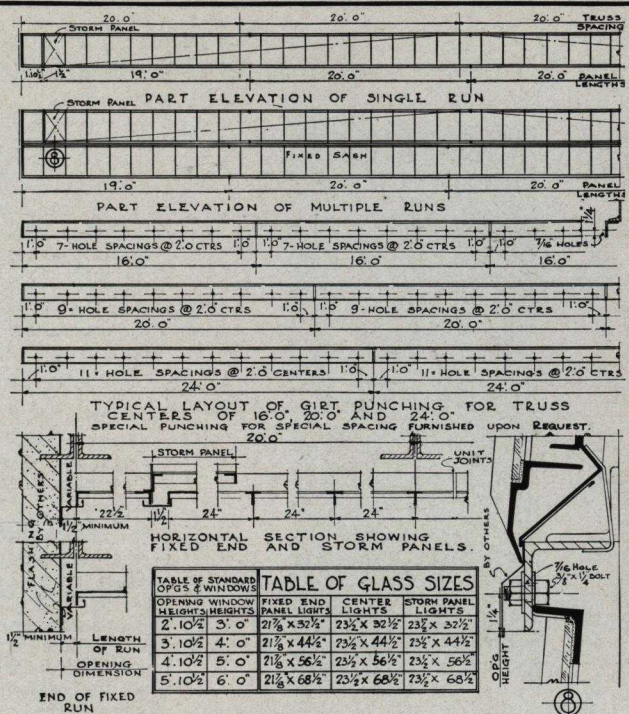
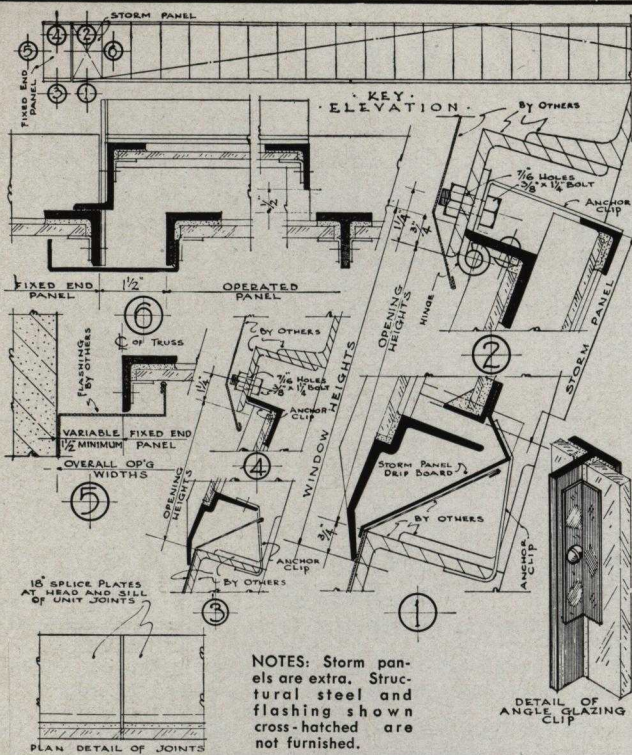


Ceco

PIVOTED WINDOWS
STANDARD AND NEAR STANDARD TYPES AND SIZES

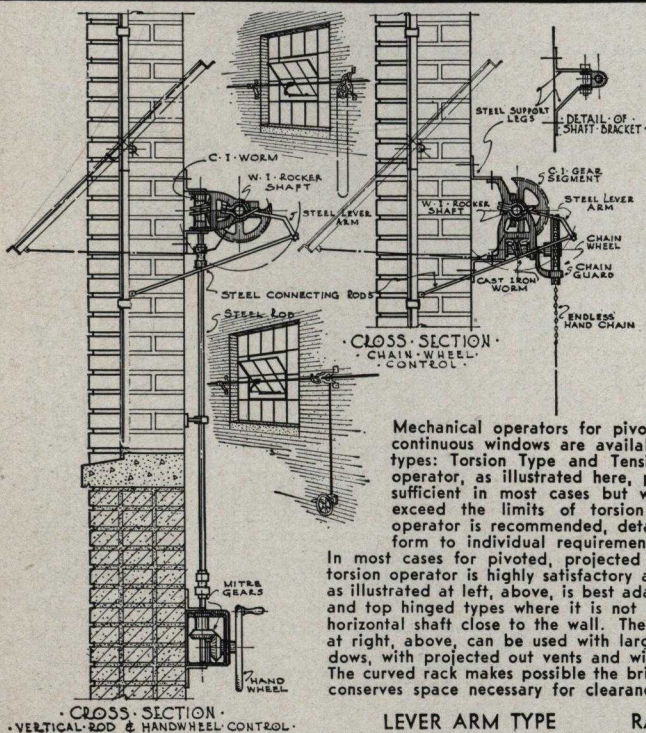
PLATE
8

CECO STEEL PRODUCTS CORPORATION



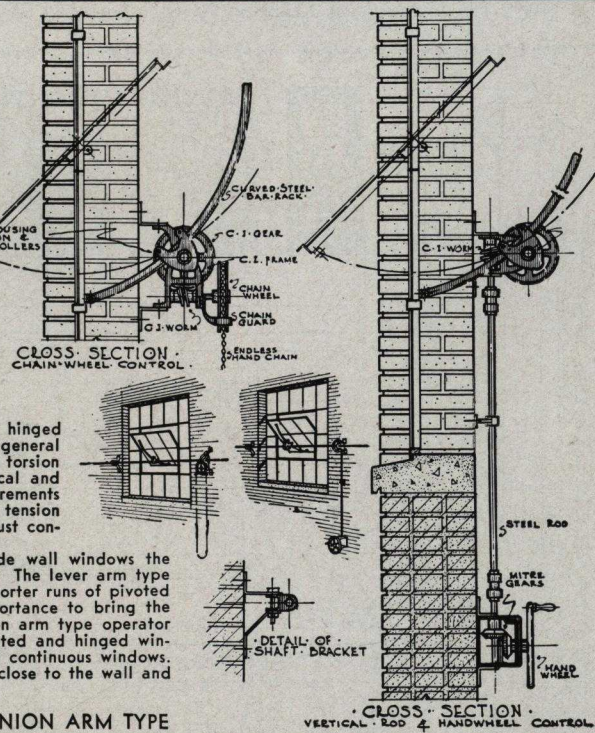
CONTINUOUS WINDOWS FIXED AND TOP-HUNG SASH

CONTINUOUS WINDOWS GIRT PUNCHING AND HORIZONTAL SECTIONS



Mechanical operators for pivoted, projected, hinged continuous windows are available in two (2) general types: Torsion Type and Tension Type. The torsion operator, as illustrated here, proves economical and sufficient in most cases but where the requirements exceed the limits of torsion operators, a tension operator is recommended, details of which must conform to individual requirements.

In most cases for pivoted, projected and hinged side wall windows the torsion operator is highly satisfactory and economical. The lever arm type as illustrated at left, above, is best adapted for the shorter runs of pivoted and top hinged types where it is not of extreme importance to bring the horizontal shaft close to the wall. The rack and pinion arm type operator at right, above, can be used with larger runs of pivoted and hinged windows, with projected out vents and with short runs of continuous windows. The curved rack makes possible the bringing of shaft close to the wall and conserves space necessary for clearance.



Ceco

CECO MECHANICAL OPERATORS

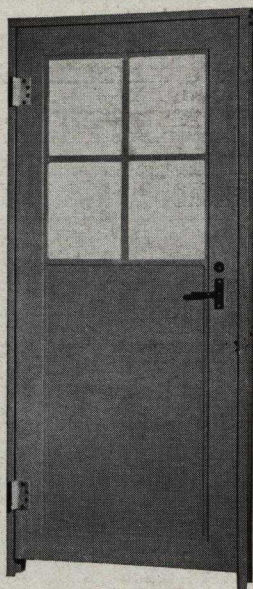
(OTHER TYPES AVAILABLE)

PLATE
9

CECO STEEL PRODUCTS CORPORATION

INDUSTRIAL STEEL DOORS

SPECIFICATIONS



Ceco manufactures a complete line of Industrial and other types of steel doors designed with particular emphasis on easy operation and secure locking. Illustrated below are the popular Swing and Slide 14 Ga. Industrial Doors.

GENERAL—All doors shall be the Industrial type as manufactured by the Ceco Steel Products Corporation of Chicago, Illinois, or approved equal, as per written approval of the architect, and shall be of sizes and types as shown on architect's drawings.

MATERIAL—The stiles and rails shall be 14 gauge sheet steel to be formed and welded into $1\frac{3}{4}'' \times 5''$ tubes.

Astragals shall be solid rolled steel sections.

Muntins shall be formed steel sections. Lower panels to be 14 gauge sheet steel.

Sash panels shall be an integral part of the door leaf, securely welded to the door rail.

CONSTRUCTION—Door corners shall be welded and ground smooth.

Steel panels shall be spot welded to stiles and rails.

The upper portion of the door shall be fitted with a sash panel, all members of which shall be welded in place. The glass shall be held in place with putty and glazing strips.

All double doors shall have astragals, rigidly attached to active leaf.

Doors shall be reinforced where required to eliminate any racking or sagging.

HARDWARE—Swing Doors—Supply Half Surface, Tight Pin, Steel Hinges.

(Note: Two hinges for each leaf are supplied for all doors up to 7' 0" high—for doors higher than 7' 0", three hinges.)

Lever latch with iron handles and hasp for padlock shall be supplied as standard on all Single and Double-Swing Doors.

Mortise Cylinder Lock, with iron handles, can be substituted for Lever Latch Hardware at slight extra cost.

(Note: Bronze Handles on Lever Latch and Cylinder Hardware are obtainable.)

(Note: Cylinder Lock Hardware may be master-keyed at slight extra cost.)

One Steel Chain Bolt and one Foot Bolt shall be supplied on the inactive leaf of each double swing door.

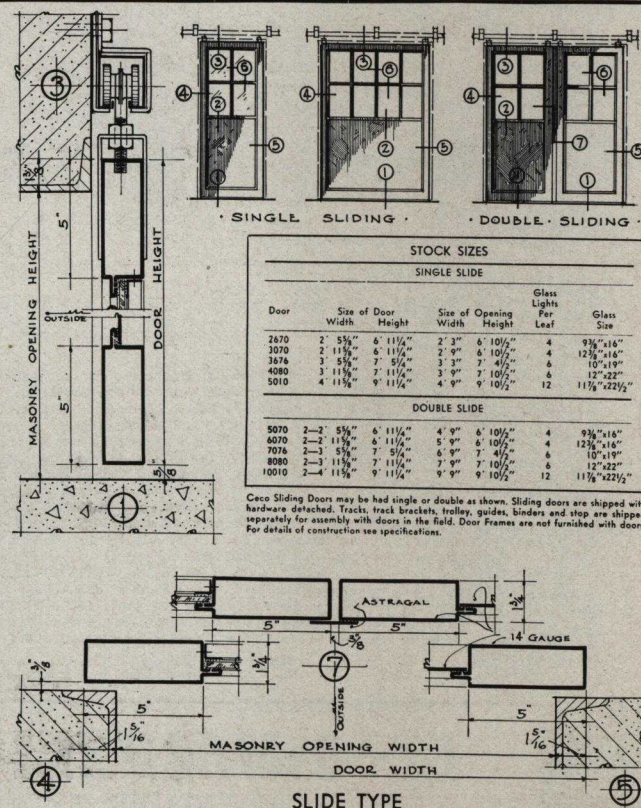
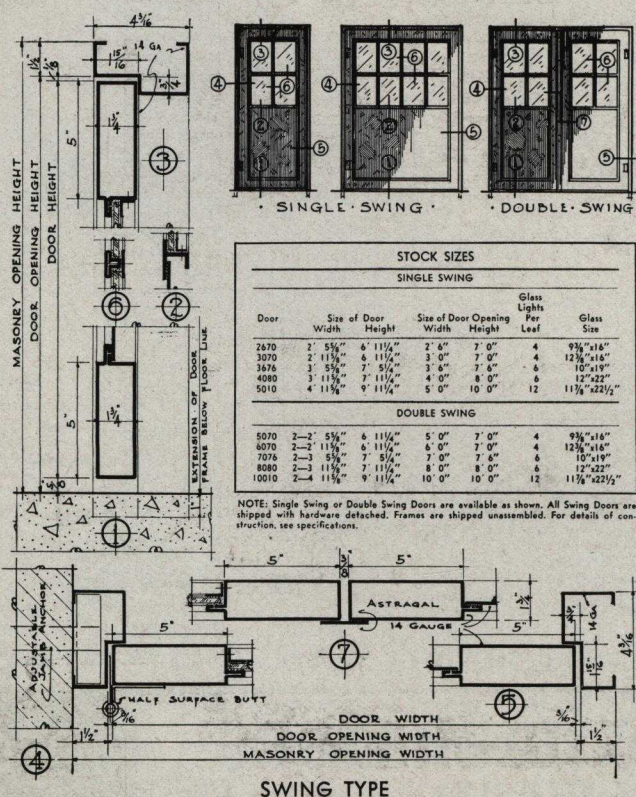
Sliding Doors—Hardware for Sliding Doors shall consist of tracks, brackets (spaced 2' 0" centers), iron handle and flush pull, hasp for padlock with necessary guides and stops. (Padlock not furnished.)

DOOR FRAMES—Door frames shall be 14 gauge steel formed into specially designed $1\frac{1}{2}'' \times 4\frac{3}{8}''$ channels with rebate.

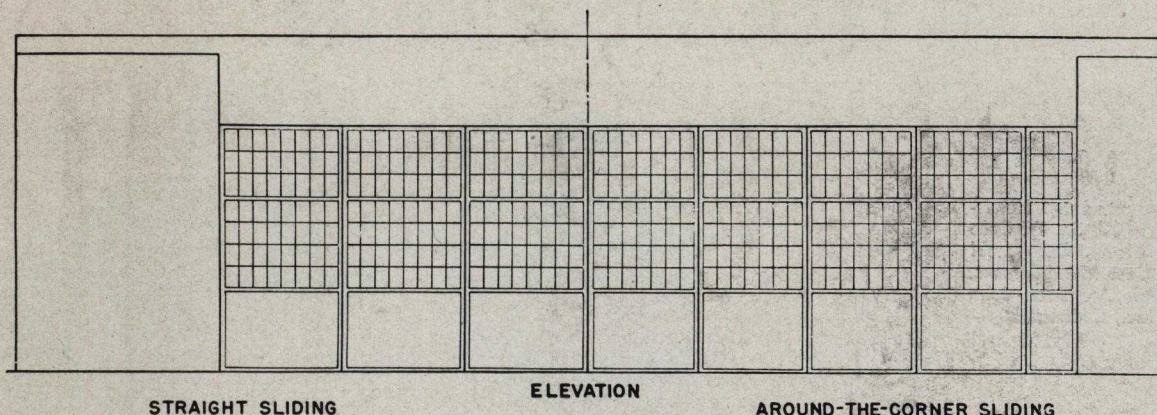
All door frames shall extend 1" below the finished floor line for anchorage.

All door frames shall be anchored to structural steel or shall be equipped with steel anchors placed approximately 36" apart and extending into the masonry.

PAINTING—The manufacturer shall give all doors and frames one coat of gray mineral paint, oven-dried, before shipment.



CECO STEEL PRODUCTS CORPORATION



For practical purposes the "Slide Type" or the "Round The Corner Types" are generally used for Hangar Doors.

Door openings of these types permit unobstructed full openings by use of a series of door panels, the full height of the opening and panels slide horizontally from the center line of the opening to the extreme jamb. Door panels roll on steel rails as specified and are guided at the top with guide angles attached to the lintel of the door opening in conjunction with roller guides fastened to the top of the door leaves.

See plan details below for open position of both Slide and Round the Corner type doors.

Door panels have rails and stiles of various sized structural members and tubular

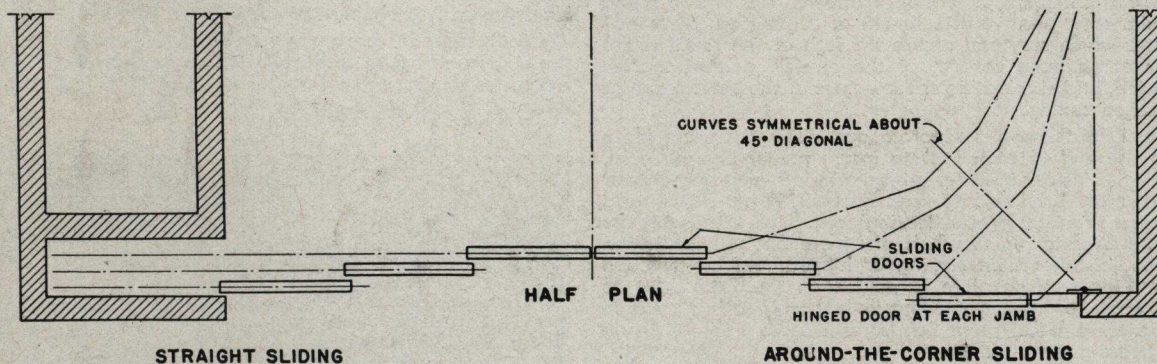
members depending on the height of the door openings. Rails and stiles consist of structural channels 3, 4 and 5-in. for openings up to and including 28 ft. high, or tubular frames of $3 \times 2\frac{1}{2}$ in. and $4 \times 2\frac{1}{2}$ in. rolled tubing.

Door panels are 10 ft. 1 in. wide in standard units, thereby making up in 10 ft. panels with 1 in. overlap, when doors are closed, for weathering purposes.

Each door panel has two adjustable roller bearing flanged wheels at the bottom and two adjustable guide rollers at the top.

OTHER TYPES OF STRUCTURAL AND TUBULAR DOORS

CANOPY • BIFOLD • SWING • ACCORDION



Ceco

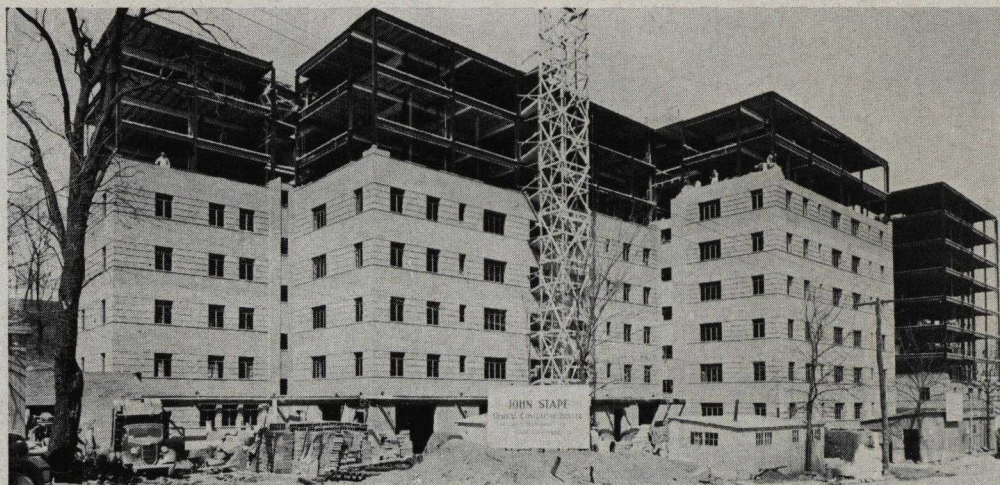
AIRPLANE HANGAR DOORS

PLATE
10

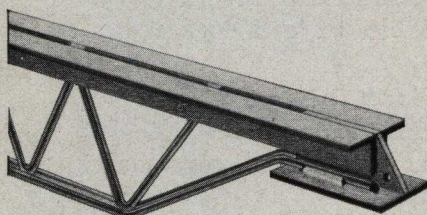
CECO STEEL PRODUCTS CORPORATION

CECO STEEL JOISTS

Parkview Apartments, Harrisburg, Pa. 110,000 Sq. Ft. Ceco Steel Joist Floors, Ceco Steel Casements, Ceco Metal Screens. Leon Chatelain, Architect. John Stapp, Inc., Contractor



Member of
The Steel Joist Institute



STANDARD — Ceco Open Web Steel Joists provide a light, easily erected fire-resistant floor system that conceals all sanitary, lighting and heating systems.

Most economical for light occupancy buildings, such as Apartments, Hospitals, Hotels, Offices, Schools, Residences and similar structures.

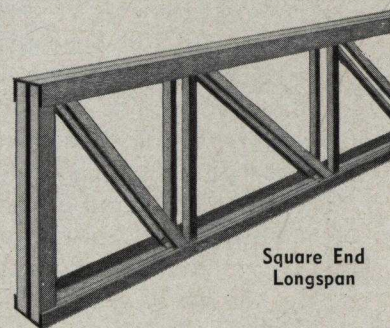
Ceco Steel Joists are made from hot rolled new billet steel, ASTM-A7, of latest adaption, structural grade for buildings. They are shop fabricated into the form of a Warren Truss by the shielded arc welding process. Underslung ends insure stability during erection. Twin chord members facilitate the placing of the floor and ceiling slabs by means of wire ties or bolts, eliminating the use of loose clips.

The Wide Top Chord, consistent with good design, provides greater lateral rigidity, gives greater bearing surfaces and less clearspan, increasing the efficiency of the centering and the floor slab. The Bottom Chord, a tension member made of two round bars, permits easy, positive attachment of ceiling lath by standard tie wires which stay and secure the lath at the ribs. Round bars allow a minimum contact of the plaster, permitting free air circulation, and eliminating shadow lines of the bottom chords in the finished ceiling.

Ceco Steel Joists have a separate and distinct bearing plate welded on the end of each joist to insure proper bearing area. Where clay tile, cinder block or other materials requiring greater bearing areas are used, a large enough bearing plate is welded to Ceco Joists to insure proper bearing area. This eliminates the use of loose bearing plates which often are not put under the ends of the joists. Where sloping or hipped roof construction is involved, the bearing plate is welded on the Ceco Joist to meet the angle of repose and insure proper bearing contact. This eliminates a lot of point bearing and loose wedges, giving improper bearing area, being used.

NAILER JOISTS — Ceco Nailer Joists are similar to Ceco Standard Joists with the addition of a 2 x 3 wood nailer attached to the Top Chord for direct application of wood floors or roofs. Larger clear openings may be spanned with nailer joists, thus eliminating columns. This is advantageous in home construction where basements are put to many living uses. For greater load-carrying capacity than Ceco Nailer Joists provide, wood nailers can be attached to standard steel joists.

LONGSPAN — Ceco Longspan Joists span clear openings up to 64 ft. 0 in. spaced to permit application of floor or roof deck directly to joists without using additional purlins. Depths of 18 in. to 32 in. permit construction of floors over gymnasiums or auditoriums without waste space between floors. One-story stores, garages, or factories can be erected without using inside columns.



Square End
Longspan

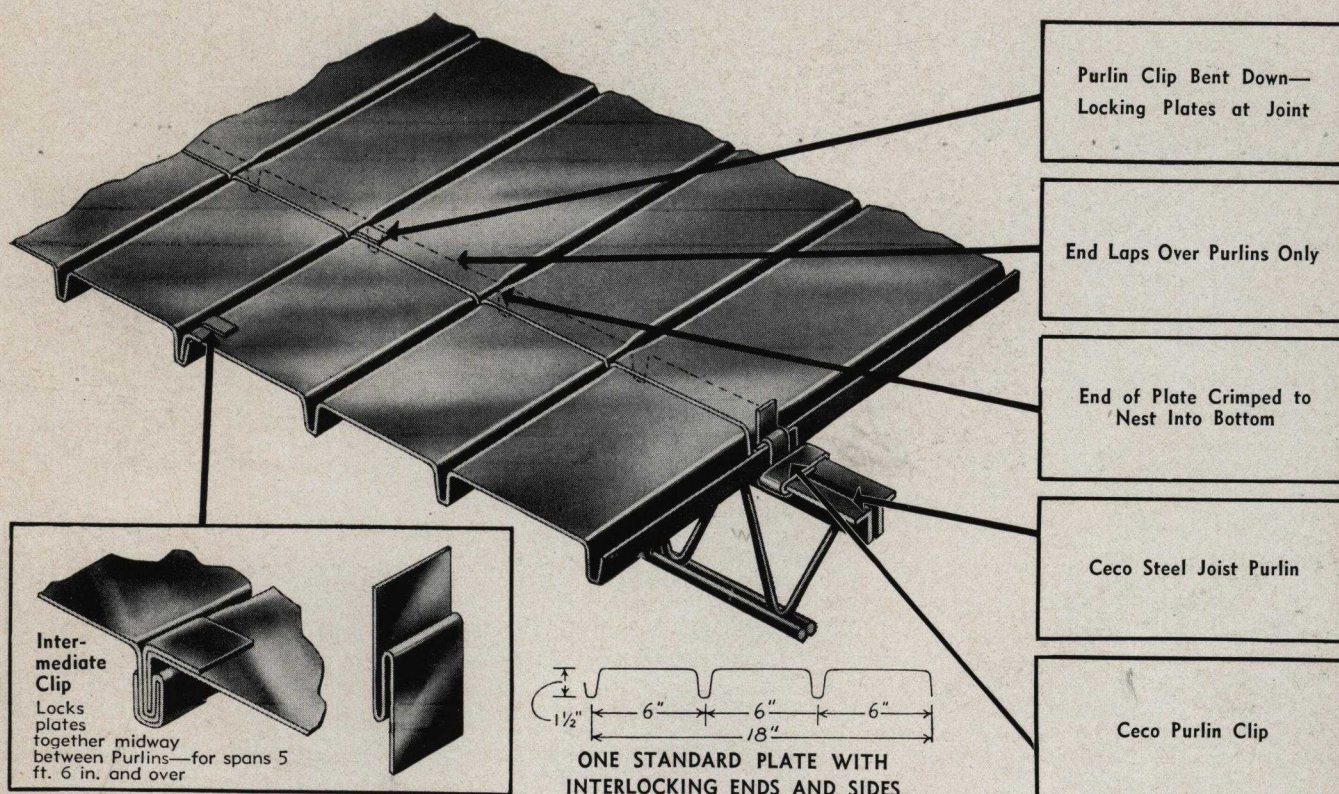
The accompanying illustration shows how Ceco Longspans are made with a box section, vertical legs of chord angles outside and all web members double angle sections. Steel Joists are often subjected to greater strain when handling and erecting than when in use, this construction insures delivery in good condition. Joists are bridged by angle cross bracing bolted at intervals of not over 10 ft. Holes can be provided for attaching nailers and for structural steel connections.

Ceco Longspans are made with square or underslung ends. On the square-end type the top cord can be sloped in one or both directions from center for roof drainage. All connections are made by the shielded arc welding process.



CECO STEEL PRODUCTS CORPORATION

CECO ROOF DECK



An economical method of roof construction. Effectively protects against wind, water and fire. Ceco Steel Roof Deck is practical for any type of building. It is suitable for either flat, pitched or arched roof construction.

The economy of Ceco Steel Roof Deck is in its unusual strength and light weight, permitting wider purlin spacing and reducing structural weight. It is simple to install; the work proceeds swiftly, being done entirely from the upper side of the roof. Only one tool, a common hammer, is required to install it. The ends and sides on all plates interlock, assuring a smooth, unbroken roof surface, yet allowing uniform expansion and contraction. It has an attractive appearance and is fire-resistant.

Ceco Steel Roof Deck consists of one standard roof plate which is interlocking and secured by clips to each other and to the structural supporting frame. End laps occur only over purlins. Ceco Steel Roof Deck is made from 20- and 18-gauge copper-bearing steel and may also be had in tight-coat galvanized steel

if desired. The copper-bearing steel plates are painted with one shop coat of metallic gray paint. This paint has a semi-gloss finish with a minimum amount of glare, giving maximum light diffusion and a highly satisfactory appearance.

From experience, we recommend that not lighter than 20-gauge steel roof deck be used. Impact loads experienced in construction work through carelessness and accidents are apt to affect lighter gauge materials. The ribs are spaced 6 in. on center and are 1 1/2 in. deep. The width of the deck plate is 18 in.; the length varies to suit the purlin spacings. The deck is furnished complete with necessary accessories.

SERVICE—Ceco Steel Products Corporation maintains a service organization national in scope. Engineering service with reference to Ceco Steel Deck and other products may be had by contacting your nearest Ceco Office; these are maintained in the principal cities throughout the country.

TABLE OF SAFE LOADS FOR CECO STEEL ROOF DECK

Total of Live and Dead Safe Uniformly Distributed Loads in Pounds per Square Foot.

PURLIN SPACING

1 1/2 Ribs 6-in. centres	Weight, per square, lb.	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"
20-gauge.....	235	122	95	77	63	52	45	38	33	29	
18-gauge.....	315	162	127	102	84	70	59	51	44	39	34



CECO STEEL PRODUCTS CORPORATION

**Ceco Manufacturing
Division Plant in Chicago**

CECO WARTIME PRODUCTS

Landing Mats
Portable Panel Bridges
V-Type Trestles
Screw Posts
Glider Sub-assemblies
Ship Parts—For Navy and
Maritime Commission

CECO PEACETIME PRODUCTS

Commercial, Industrial, Casement and
Basement Windows and Doors
Metal Lath and Accessories
Steel Joists and Roof Deck
Metal Frame Screens
Concrete Reinforcing Bars
Meyer Steelforms, Adjustable Shores
Column Clamps, Welded Fabric, Weather-
strips

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Indianapolis*
Jersey City, Foot of New York Ave.
Kansas City, 508 Waltower Bldg.
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Milwaukee*
Minneapolis, 2801 E. Hennepin Ave.
New Orleans*

Oklahoma City, 412 Insurance Bldg.
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San Antonio, 501 American Hospital
and Life Bldg.
San Francisco, 1280 Indiana St.
St. Louis, 4903 Delmar Blvd.
Washington*

*Closed temporarily on account of the war.

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